REMARKS

Claims 13-16 are currently active.

Antecedent support for the amendment to Claim 13 is found on page 19, lines 1-6.

Applicant wishes to thank the Examiner for his detailed review and comments in the Advisory Action.

The Examiner has rejected Claims 13-16 under 35 U.S.C. Section 101 because the claimed invention is directed to nonstatutory subject matter. Applicant respectfully traverses this rejection. Claim 13 of applicant requires the use of a computer which takes information that is introduced into the computer and then produces images from that information with the computer and finally displays the images on a display, another piece of hardware. The limitation of a computer and limitation of a display in Claim 13 dictate that applicant's claimed invention is recognized patentable subject matter. Independent Claim 13 is simply not a series of steps or acts to be performed. Accordingly, Claims 13-16 are statutory subject matter in regard to patent law.

The Examiner has rejected Claims 13-16 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement and the Examiner states that the claims contain subject matter which was not described in the specification in such a way as to

reasonably convey to one skilled in the art that the inventor, at the time the application was filed, had possession of the claimed invention. The Examiner further states that applicant's specification discloses six 8-bit quantities as opposed to a six bit quantity, and computing eight five bit hash values. Applicant's specification failed to describe any six bit quantity. See page 6, second paragraph of the Office Action dated January 19, 2010. Applicant has amended Claim 13 to obviate this rejection.

The Examiner has rejected Claims 13-16 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to accurately point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner again states that applicant's specification only discloses six 8 bit quantities. Claim 13 has been amended to obviate this rejection. Accordingly, this rejection is also obviated.

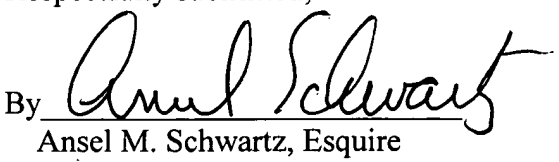
The Examiner has rejected Claims 13-16 as being anticipated by Ebert. Applicant respectfully traverses this rejection.

In regard to Claim 13, Ebert is actually the prior art Perlin noise developed by applicant. As detailed in Ebert et al. 1998, Noise is determined at point (x,y,z) by computing a pseudo-random gradient at each of the eight nearest vertices on the integer cubic lattice and then doing splined interpolation. Ebert is very efficient but contains some deficiencies. Ebert creates discontinuities across the coordinate-aligned faces of adjoining cubic cells. These discontinuities become noticeable when a Noise-displaced surface is shaded; then the surface normal (which is

itself a derivative operator) has a visibly discontinuous derivative. A second deficiency is that whereas gradients are distributed uniformly over a sphere, the cubic grid itself has directional biases, being shortened along the axes and elongated on the diagonals between opposite cube vertices. This directional asymmetry tends to cause a sporadic clumping effect, where nearby gradients that are almost axis-aligned, and therefore close together, happen to align with each other, causing anomalously high values in those regions. Thus, noticeable visual artifacts due to the simply way that gradients were chosen and blended appear. These artifacts are specifically removed by the claimed invention. Respectfully, Ebert does not teach or suggest "by mapping a six bit quantity from last stage L modules of a plurality of stages of modules." Accordingly, Claim 13 is patentable over Ebert. Claims 14-16 are dependent to Claim 13 and are thus patentable.

In view of the foregoing amendments and remarks, it is respectfully requested that the outstanding rejections and objections to this application be reconsidered and withdrawn, and Claims 13-16, now in this application be allowed.

Respectfully submitted,

By 

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